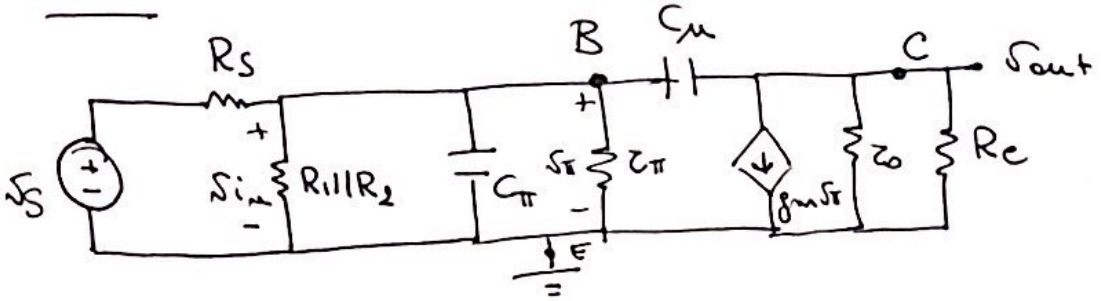
MILLER EFFECT IN DIFFERENT CONFIGURATIONS

CE

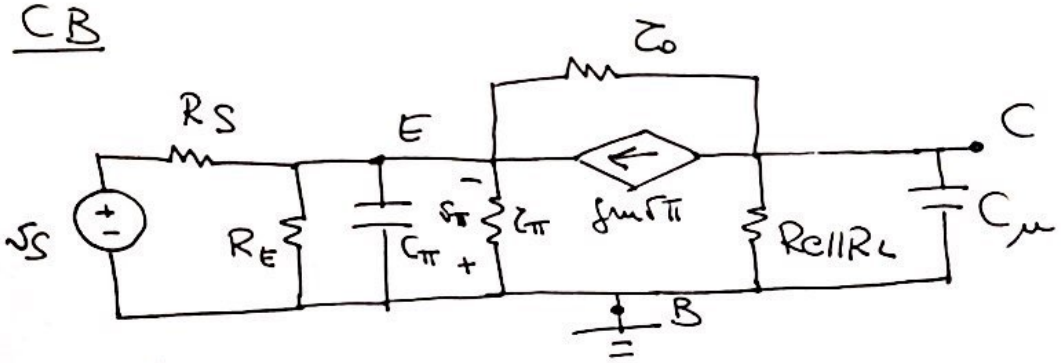


C_μ : Capacitor between the input and the output

$C_{Mi} = C_\mu (1 - A_V)$ $\quad A_V < 0$ and large

$C_{Mo} = C_\mu \left(1 - \frac{1}{A_V}\right)$ $\quad$ Miller effect is significantly reducing the GBW product.

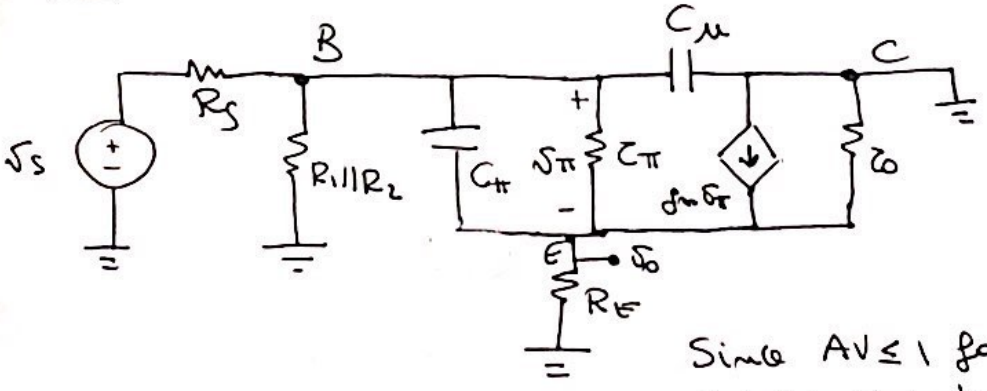
CB



$A_V > 0$ and large

However, there is no capacitor between the input and the output. Thus the Miller effect doesn't affect the GBW product.

CC



C_π is the capacitor between the input and the output. Thus

$C_{Mi} = C_\pi (1 - A_V)$

$C_{Mo} = C_\pi (1 - 1/A_V)$

Since $A_V \leq 1$ for a CC, the GBW is not reduced due to the Miller effect.